

Amendments to the Claims:

Please cancel Claims 15-26.

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-7 (canceled)

Claim 8 (original): A method for forming a LDMOS transistor, comprising:

- forming an epitaxial layer on a semiconductor substrate;
- forming a deep n-well region in said epitaxial layer;
- forming a patterned photoresist layer over said deep n-well region wherein said patterned photoresist layer comprises at least one opening;
- implanting a boron species into said deep n-well through said opening;
- performing a hard bake process on said patterned photoresist layer;
- implanting an arsenic species into said deep n-well through said opening;
- forming LOCOS isolation structures in said deep n-well region; and
- forming a gate dielectric layer on said deep n-well region.

Claim 9 (original): The method of claim 8 wherein said hard bake process comprises heating said patterned photoresist layer to temperatures between 75°C and 200°C.

Claim 10 (original): The method of claim 9 wherein forming said LOCOS isolation structures comprises performing thermal oxidation processes at temperatures greater than 800°C.

Claim 11 (previously presented): The method of claim 8 wherein implanting the boron species into said deep n-well through said opening comprises implanting the boron species at two or more implantation energies and dose levels through said opening.

Claim 12 (previously presented): The method of claim 8 wherein the hard bake process on said patterned photoresist layer is performed after implanting the boron species into the deep n-well region.

Claim 13 (previously presented): The method of claim 8 wherein the implanting of the arsenic species into the deep n-well is performed after the hard bake into said deep n-well through said opening.

Claim 14 (previously presented): The method of claim 8 wherein the forming of the LOCOS isolation structures in said deep n-well region is performed after implanting the arsenic species into a source region in the deep n-well.

Claims 15-26 (canceled)